

Remarks

Support for the “whereby” clause added to Claims 1, 21, and 24 can be found in paragraph [0013].

Claims 1, 2, and 4 to 25 were rejected under 35 U.S.C. 103 as obvious over Sugawara in view of Stapleton et al. (hereinafter “Stapleton”).

As the Examiner notes, Sugawara discloses a test of an IC, but “neither discloses that the desired voltage values are stored within tables nor specifies that the desired voltages should be determined at various clock speeds.” Instead, Sugawara stores data in a shift register. When the power is turned off, all the data in the shift register is lost. That would not be acceptable in Applicant’s invention as the stored data must be available for use each time the power is turned on. All of Applicant’s claims now require that the data must be stored either by a non-volatile memory method or by an anti-fuse method. Both of those methods prevent data from being lost when the power is turned off. The loss of data when the power is turned off is not a concern to Sugawara because in column 5, lines 33 to 34, Sugawara states, “Consequently, it is possible to quickly and optimally determine data to be fixed on the mask.” Since Sugawara fixes the data on to the mask, the loss of power will not cause a loss of data. Therefore, there is no reason for Sugawara to use a non-volatile memory method or an anti-fuse method to store data instead of using a shift register.

The Examiner cites column 4, lines 30+, of Sugawara, which states that data is obtained “for which the value of the current is a desired value.” Thus, the shift register

in Sugawara controls only a single value, the current to be used. All of Applicant's claims now require that the chips must be tested to determine at least two data and that at least two values based on that data must be entered into the table. Since there is no need to store values in the Sugawara circuit, other than the current, it would not be obvious to modify Sugawara to store at least two values.

The Examiner cites Stapleton as disclosing "the processor sending a desired voltage level to a voltage regulator to control desired core voltage supply." That is, like Sugawara, Stapleton stores a single value, "a desired voltage level." Again, Applicant's claims require that at least two values must be stored.

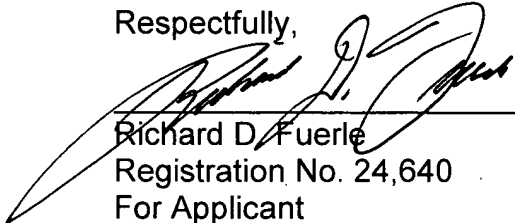
All of Applicant's claims require that the values must be stored in a reference data table and that a monitor circuit must access the reference data table and use the data accessed from the table to determine which circuit blocks will be used and the conditions needed to attain the desired performance. Neither Sugawara nor Stapleton disclose the use of a reference data table. While the Examiner argues that reference data tables are "a well known method of internally storing data," he cites no reference that suggests the use of a reference data table for the purpose that Applicant is using it. Since neither Sugawara nor Stapleton discloses a reference data table, and no other reference is relied upon that discloses a reference data table, it can not be concluded that its use in Applicant's invention would be obvious.

Claim 3 was rejected under 35 U.S.C. 103 as obvious over Sugawara in view of Stapleton further in view of Cantone et al. (hereinafter "Cantone"). Sugawara and

Stapleton have been discussed. Cantone is cited to show fuse burning to store reference data. However, there is no mention of a reference data table in Cantone. In addition, there is no suggestion in Sugawara or Stapleton that suggests the desirability of storing data in their circuits by using fuse burning. Sugawara uses a shift register, which is a very different storage type of data storage device because the data is lost when the voltage is turned off. Sugawara is therefore able to enter new data into his shift register each time he turns the voltage on. He could not do that if he used fuse burning, as in Cantone. Therefore it would not be obvious to combine Cantone with Sugawara. Stapleton, stores data as a VID code and nothing in the references cited suggests that fuse burning would be advantageous in Stapleton. Therefore, it is not obvious to combine Cantone with Stapleton.

As all of the rejections are now believed to be overcome, reconsideration and allowance of all of the claims are requested.

Respectfully,



Richard D. Fuerle
Registration No. 24,640
For Applicant

Richard D. Fuerle
1711 West River Road
Grand Island, NY 14072
(716)-774-0091
April 16, 2004
CASE YA02